



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1459
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,902	09/18/2006	Ivan Engmark Mortensen	502424.117539	4969
29540	7590	12/11/2008		
DAY PITNEY LLP 7 TIMES SQUARE NEW YORK, NY 10036-7311			EXAMINER YOUNGER, SEAN JERRARD	
			ART UNIT	PAPER NUMBER
			3745	
			MAIL DATE	DELIVERY MODE
			12/11/2008 PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/586,902

Applicant(s)

MORTENSEN ET AL.

Examiner

SEAN J. YOUNGER

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/92)
Paper No(s)/Mail Date 21 July, 2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitations including a connector box (103) comprising a sealing part (304) consisting of a sealing bag are already contained in claim 1.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claim 1, the phrase "can be" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

5. Claim 3 recites the limitation "said first part" in line 1 and "said part" in line 3. There is insufficient antecedent basis for these limitations in the claim.

6. Claim 5 recites the limitation "said element" in line 2. There is insufficient antecedent basis for this limitation in the claim.
7. Claims 2, 4 and 6-10 are indefinite by virtue of their dependence (directly or indirectly) from either claims 1, 3 or 5.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 2, 4-8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Burris et al. [U.S. 5,533,165]. Regarding claims 1 and 4, Burris et al. disclose a connector box (3) adapted to be partly embedded in a fiber-reinforced part of a wind turbine, where the connector box comprises a base part (20) and a sealing part (80). The sealing part seals off and protects a compartment (100) between the sealing part and the base part during manufacture of said fiber-reinforced part. The sealing part can be removed after manufacture making the compartment accessible, and the base part is adapted to fasten the connector box in the fiber-reinforced part by having a larger circumference near its bottom than near its top (see figure 2).
10. Regarding claim 2, a first part (101) of the compartment fixates one part of an element. Another part of the element is accessible from a second part (103) of the compartment [column 5, lines 41-61].

11. Regarding claims 5-7, the element comprises a current conducting part, which is a fiber optic cable [column 5, lines 49-50], fixated in the first part (101) of the compartment (100), being accessible from the second part (103) of the compartment [column 5, lines 51-53]. Being a fiber optic cable, the element is inherently adapted for connection of light emitting or receiving means.
12. Regarding claims 8 and 10, the connector box of Burris et al. can be made of plastic [column 6, lines 7-10].

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burris et al. [U.S. 5,533,165]. As far as claim 3 is definite, Burris et al. disclose all elements substantially as claimed, but fail to disclose that the first part (101) of the compartment is at least partially filled with a cured material, fixating a part of an embedded element. Using a cured resin as a means of fixation is considered to be an engineering expedient. Use of cured resins is central to the fiber-composite construction art, and use of the cured material as a "glue" to fixate an element would be well within the technical grasp and customary practice of one of ordinary skill. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was

made to use a cured resin to fixate an element in the first part of the connector box, as an engineering expedient.

15. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burris et al. [U.S. 5,533,165] in view of Adolphs et al. [U.S. 6,615,875]. Burris et al. disclose all elements substantially as claimed, but fail to disclose that the sealing part is made of a resin-proof plastic. Adolphs et al. teach a method of making a fiber-reinforced pipe including a resin-proof thermoplastic film (48) laid underneath the reinforcing fiber sheets. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the connector box of Burris et al. to include a resin-proof plastic sealing part, as taught by Adolphs et al., in order to keep the second part (103) of the compartment free of resins used in the fiber composite construction process.

16. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burris et al. [U.S. 5,533,165] in view of Rebsdorf [U.S. 6,619,918]. Burris et al. teach a connector box adapted to be embedded in a fiber-reinforced composite material, but fail to disclose that that material is a portion of a wind turbine blade. Rebsdorf teaches a wind turbine with blades comprising multiple fiber-optic sensor locations (7, 8). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the connector box of Burris et al. by using it in a wind turbine blade, as taught by Rebsdorf, because the technique for improving

an embedded electronic junction box in a wind turbine was part of the capabilities of a person of ordinary skill in the art, in view of the teaching of the technique for improvement in other situations.

17. Regarding claim 12, the connector box of Burris et al. is accessible after manufacture [column 5, lines 51-55].

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

19. Patents to Johnston et al. [U.S. 4,976,587], Olsen et al. [U.S. 6,457,943], Bartlett [U.S. 6,800,956], Grabau et al. [U.S. 7,364,407] disclose composite wind turbine blades which are fiber-reinforced.

20. The patent to Olsen et al. [U.S. 6,612,810] discloses a wind turbine with powered terminals for purposes such as heating, temperature sensing, etc. including transmission means such as an optical fibre.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN J. YOUNGER whose telephone number is (571)270-3763. The examiner can normally be reached on M-F 7:30-5:00 EST, Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on 571-272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sean J. Younger/
Examiner, Art Unit 3745

/Edward K. Look/
Supervisory Patent Examiner, Art Unit 3745